

### **Remarks/Arguments**

Reconsideration of this application is requested.

### **Drawings**

The drawings are objected to under MPEP 608.02(g). The Action asserts that Figure 11 should be designated with a legend such as --Prior Art--. In response, Figure 11 is amended to include the legend --Prior Art--. A replacement sheet and an annotated sheet showing changes are enclosed.

### **Claim Status**

Claims 1-20 were previously presented. Claims 13-20, which are drawn to the non-elected invention of Group II, are canceled without prejudice. Claims 3, 8-10 and 12, which are drawn to non-elected species, are withdrawn from consideration but remain pending. Claims 1 and 11 are amended and claim 2 is canceled, without prejudice. New claims 21-24 are added and are readable on the elected invention and species. Accordingly, claims 1, 3-12 and 21-24 are now pending.

### **Claim Rejections - 35 USC 102**

Claims 1, 2, 4, 6 and 11 are rejected under 35 USC 102(a) as anticipated by Chen (US 2002/0096754). In response, independent claims 1 and 11 are amended to clearly distinguish over Chen. Applicant further submits that independent claim 6 distinguishes over Chen in its form as filed.

The present invention distinguishes over Chen in that an insulating resin attaches a second semiconductor chip onto a first semiconductor chip. Applicant's specification makes an important distinction between adhesive and insulating resin that functions as adhesive. Page 14, paragraph [0050], describes a semiconductor chip 4a as mounted to substrate 1 via adhesive layer 4c, and semiconductor chip 5a as mounted to semiconductor chip 4a via insulating resin 5c. Insulating resin 5c is a paste-type resin or a sheet-type resin, such as epoxy resin, acrylic resin, or

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**Amendments to the Drawings:**

The attached sheet of drawings includes changes to Fig. 11. This sheet, which includes Figs. 10 and 11, replaces the original sheet including Figs. 10 and 11. In Figure 11, the legend --Prior Art-- has been added.

Attachment: Replacement Sheet  
Annotated Sheet Showing Changes

maleimide resin. An insulating resin that functions as an adhesive is advantageous because it can insulate semiconductor chips 4a, 5a from each other better than a non-insulating adhesive.

Chen, by contrast, discloses an upper integrated circuit 46 adhered to a lower integrated circuit 34 through an adhesive layer 52 so as to form a stack with lower integrated circuit 34. See Chen, page 2, paragraph [0025]. However, Chen does not disclose or suggest that this adhesive layer 52 insulates.

Claims 1 and 11 are amended to require an insulating resin that attaches the upper semiconductor chip (or electronic component) to the lower semiconductor chip (or electronic component). Claim 6 included this limitation as filed. Therefore, since Chen does not disclose this feature, it cannot anticipate claims 1, 6 or 11, or claim 4 dependent thereon. Claim 2 is canceled, since it is now incorporated into claim 1.

#### **Claim Rejections - 35 USC 103(a)**

Claim 5 is rejected under 35 USC 103(a) as obvious over Chen in view of LoBianco et al. (US 6,340,846). Claim 7 is rejected as obvious over Chen in view of Eguchi et al. (US 6,784,541). Applicant respectfully traverses these rejections.

Claim 5 as filed recites an insulating resin that attaches the upper semiconductor chip to the lower chip. Claim 7 depends from claim 1, as amended, and thus also includes this limitation. As discussed above, Chen contains no such disclosure. LoBianco and Eguchi do not remedy the deficiencies of Chen. Although LoBianco and Eguchi suggest the use of an epoxy resin, neither LoBianco nor Eguchi discloses or suggests a projecting part that extends from the upper semiconductor chip and attaches to the lower semiconductor chip via an insulating resin. In addition, Eguchi does not disclose or suggest attaching upper and lower

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semiconductor chips to form a stacked structure, and cannot therefore suggest forming an insulating layer between upper and lower semiconductor chips.

For these reasons, claims 5 and 7 are not rendered obvious by Chen, LoBianco and Eguchi. The rejections under 35 USC 103(a) should be withdrawn.

#### **New Claims**

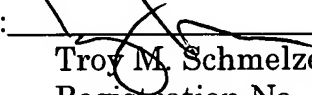
New claims 21-24 are added and are readable on the elected invention and species. Claims 21 and 22 further define the insulating resin according to the specification on page 14, paragraph [0050]. Claims 23 and 24 further define the projecting part according to the specification on page 14, paragraph [0049].

#### **Conclusion**

This application is now believed to be in condition for allowance. The Examiner is invited to telephone the undersigned to resolve any issues that remain after consideration of this response. Any fees due with this response may be charged to our Deposit Account No. 50-1314.

Respectfully submitted,  
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FIG.10

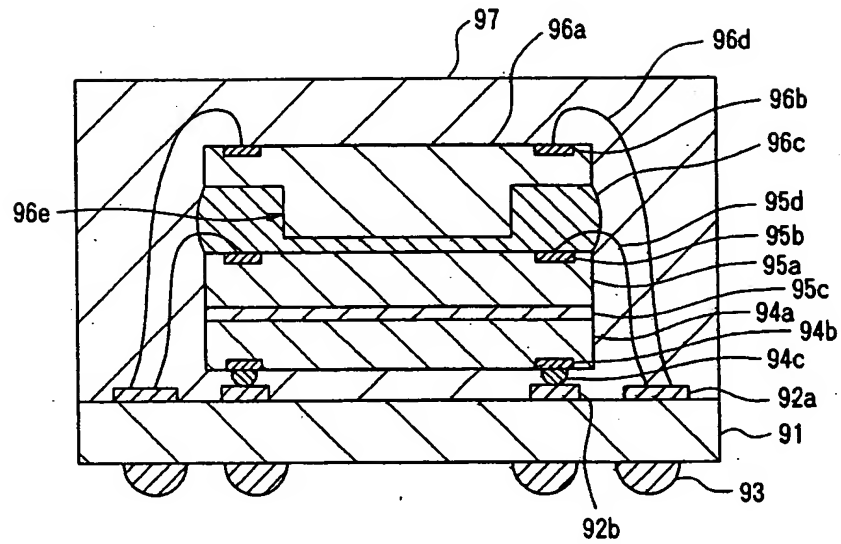
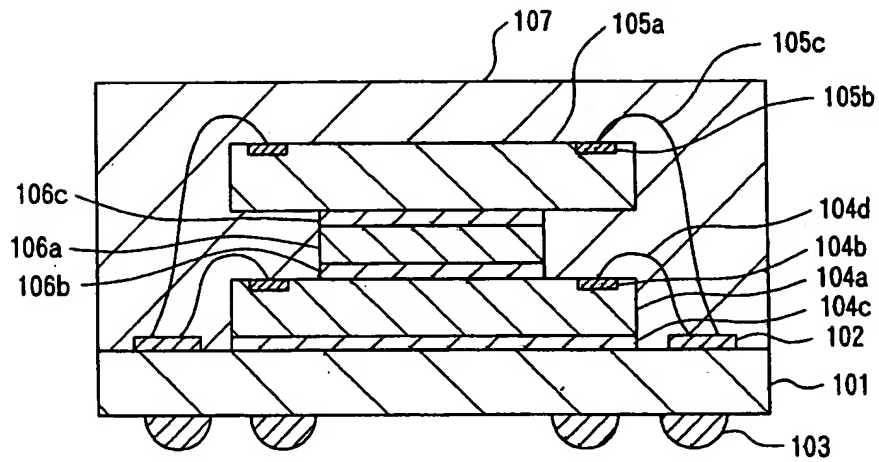


FIG.11



"Prior Art"